Scopus

Document details

Back to results | 1 of 1

Export Download Print E-mail Save to PDF Add to List More...

Full Text View at Publisher

2014 Australasian Telecommunication Networks and Applications Conference, ATNAC 2014
23 January 2015, Article number 7020903, Pages 228-232
2014 Australasian Telecommunication Networks and Applications Conference, ATNAC 2014; Melbourne; Australia; 26 November 2014 through 28 November 2014; Category numberCFP1418D-ART; Code 110256

BER performance of OFDM system with the effect of error control code

(Conference Paper)

Jamal, S. ✉, Abdullah, A. ✉, Rahman, T. ✉, Abdullah, K. ✉, Ramli, H.A.M. ✉, Ismail, A.F. ✉

Faculty of Engineering, International Islamic University Malaysia, Kuala Lumpur, Malaysia

Abstract

View references (9)

Orthogonal Frequency Division Multiplexing (OFDM) is one of the promising modulation techniques suitable for high data rates in a wireless communication system. OFDM is the most effective modulation technique suitable for multipath communication channel and fading environment at reasonable complexity. However, the existence of Error Control Coding (ECC) in OFDM system is necessary for the reliable data transmission. This is due to the capability of ECC which can detect and correct the data received. Two types of ECC performance which are Hamming code and convolutional code are investigated in this paper. The simulation system and parameter are described and the results are discussed. © 2014 IEEE.

Author keywords

ECC OFDM Rayleigh Channel Wireless Communication System

Indexed keywords

Engineering controlled terms: Codes (symbols) Complex networks Convolutional codes Frequency division multiplexing Frequency modulation Modulation Telecommunication networks Wireless telecommunication systems

ECC
Error control code
Error control coding
Modulation techniques
Multipath communications
Rayleigh channel
Reliable data transmission
Wireless communication system

Engineering main heading: Orthogonal frequency division multiplexing

ISBN: 978-147995044-7
Source Type: Conference Proceeding
Original language: English

DOI: 10.1109/ATNAC.2014.7020903
Document Type: Conference Paper
Sponsors:
Publisher: Institute of Electrical and Electronics Engineers Inc.

View all related documents based on references

Find more related documents in Scopus based on:

Authors > Keywords >

References (9)

View in search results format >

All | Export | Print | E-mail | Save to PDF | Create bibliography

1 Cimini, L.J.

Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing

(1985) *IEEE Transactions on Communications*, 33 (7), pp. 665-675. Cited 1548 times.
doi: 10.1109/TCOM.1985.1096357

View at Publisher

2 Hwegi, Y., Kordi, H.

Reliable data transmission over rayleigh channel

(2010) *Proceedings 2010 IEEE International Conference on Software Engineering and Service Sciences, ICSESS 2010*, art. no. 5552330, pp. 471-473.
ISBN: 978-142446052-6
doi: 10.1109/ICSESS.2010.5552330

View at Publisher

3 Jatinder, S.
A comparative study of error detection and correction coding techniques
(2012) *Advanced Computing & Communication Technologies (ACCT), 2012 Second International Conference On. IEEE*

4 Sigurd, S.
An Introduction to 802.11 ac
(2011) *White Paper, Quantenna Communications Inc*, 9.

5 Al-Rawi, G.A., Al-Naffouri, T.Y., Bahai, A., Cioffi, J.

Exploiting error-control coding and cyclic-prefix in channel estimation for coded ofdm systems

(2003) *IEEE Communications Letters*, 7 (8), pp. 388-390. Cited 25 times.
doi: 10.1109/LCOMM.2003.814712

View at Publisher

6 Lin, S., Lin, S., Costello, D.J.
Error control coding
(2004) *Pearson Education India*

7 Yuan, J.
A practical guide to error-control coding using Matlab
(2010) *Artech House*, pp. 155-163.

8 Peter, E.
Coding for noisy channels
(1955) *Proceedings of the Institute of Radio Engineers.*, 43 (3).

9 Claude, D., Fort, A.
Selection of channel coding for low-power wireless systems
(2003) *Vehicular Technology Conference 2003. VTC 2003-Spring. the 57th IEEE Semiannual.*, 3.
IEEE

‹ Back to results | 1 of 1 ^ Top of page